

## The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
Bureau of Health Care Safety and Quality
Medical Use of Marijuana Program
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**Title:** Protocol for Sampling and Analysis of Finished Medical Marijuana Products and Marijuana-Infused Products for Massachusetts Registered Medical Marijuana Dispensaries

## Exhibit 6. Analysis Requirements for Microbiological Contaminants and Mycotoxins in Medical Marijuana Products<sup>a</sup>

| Cannabis<br>Material                             | Total<br>Viable<br>Aerobic<br>Bacteria<br>(CFU/g) | Total<br>Yeast<br>and<br>Mold<br>(CFU/g) | Total<br>Coliforms<br>(CFU/g) | Bile-<br>tolerant<br>Gram-<br>negative<br>Bacteria<br>(CFU/g) | E Coli<br>(pathogenic<br>strains) and<br>Salmonella<br>spp. | Mycotoxins <sup>c</sup>                          |
|--|---|--|-------------------------------|---|---|--|
| Unprocessed<br>Materials <sup>b</sup>            | 10 <sup>5</sup>                                   | 10 <sup>4</sup>                          | 10 <sup>3</sup>               | 10 <sup>3</sup>   |   |  |
| Processed<br>Materials <sup>b</sup>              | 10 <sup>5</sup>                                   | 10 <sup>4</sup>                          | 10 <sup>3</sup>               | 10 <sup>3</sup>   | Not detected in 1 g   | <20 µg of any<br>mycotoxin per kg of<br>material |
| CO <sub>2</sub> and<br>Solvent-based<br>Extracts | 10 <sup>4</sup>                                   | 10 <sup>3</sup>                          | 10 <sup>2</sup>               | 10 <sup>2</sup>   |   |  |

## CFU: colony forming unit

Please note that these Protocols are continually evaluated and revised based upon new scientific and industry information.

<sup>&</sup>lt;sup>a</sup> Except for mycotoxins, analysis requirements are based on AHP (2013).

<sup>&</sup>lt;sup>b</sup> Unprocessed materials include minimally processed crude cannabis preparations such as inflorescences, accumulated resin glands (kief), and compressed resin glands (hashish). Processed materials include various solid or liquid infused edible preparations, oils, topical preparations, and water-processed resin glands ("bubble hash") (AHP, 2013).

<sup>&</sup>lt;sup>c</sup> Mycotoxins include alfatoxin B1, alfatoxin B2, alfatoxin G1, alfatoxin G2, and Ochratoxin A.